

REMARKS

Claims 1-22 are pending in this application.

Claims 1-8 are rejected.

Claims 9-22 have been withdrawn from consideration.

Claims 3, 4 and 8 have been cancelled, with out prejudice.

Claims 1 and 5 have been amended. Support for these amendments can be found throughout the specification, claims and drawings as originally filed.

35 USC §103(a) REJECTION

Claims 1-3, 6 and 7 stand rejected under 35 USC §103(a) as being unpatentable over U.S. Patent No. 4,538,645 to Perach in view of U.S. Patent No. 5,707,039 to Hamilton et al.

The Applicants respectfully traverse the 35 USC §103(a) rejection of claims 1-3, 6 and 7. Claim 3 has been canceled, without prejudice, and substantially incorporated into claim 1.

The standard for obviousness is that there must be some suggestion, either in the reference or in the relevant art, of how to modify what is disclosed to arrive at the claimed invention. In addition, "[s]omething in the prior art as a whole must suggest the desirability and, thus, the obviousness, of making" the modification to the art suggested by the Examiner. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 1051, 5 U.S.P.Q.2d (BNA) 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988). Although the Examiner may suggest the teachings of a primary reference could be modified to arrive at the claimed subject matter, the modification is not obvious unless the prior art

also suggests the desirability of such modification. *In re Laskowski*, 871 F.2d 115, 117, 10 U.S.P.Q.2d (BNA) 1397, 1398 (Fed. Cir. 1989). There must be a teaching in the prior art for the proposed combination or modification to be proper. *In re Newell*, 891 F.2d 899, 13 U.S.P.Q.2d (BNA) 1248 (Fed. Cir. 1989). If the prior art fails to provide this necessary teaching, suggestion, or incentive supporting the Examiner's suggested modification, the rejection based upon this suggested modification is error and must be reversed. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d (BNA) 1566 (Fed. Cir. 1990).

The law is also clear that a claim in dependent form shall be construed to incorporate all the limitations of the claim to which it refers. 35 USC §112 ¶4.

In the interests of expediting prosecution of the instant application, and without any admission that an amendment is necessary, the Applicant have amended claim 1 to recite, among other things, a variable bleed solenoid which has low leak properties comprising: (1) a housing defining an internal chamber therein; (2) an electromagnetic coil wound on a bobbin wherein said bobbin is coaxially mounted within the housing; (3) an axially movable armature mounted in the internal chamber, said armature having a first end and a second end; (4) an actuation member extending from an end of said armature; (5) a pole piece and flux tube operably associated with said armature for moving said armature in a first direction upon energizing said coil; (6) a valve manifold including a passage for a hydraulic supply pressure and a chamber leading to a hydraulic control side pressure and for directing said control side to an exhaust; (7) a first valve seat and a second valve seat; (8) a valve positioned for selectively sealing on said first valve seat or said second valve seat, wherein said actuation member is operable to selectively contact said valve; (9) a spring for biasing said armature; and

(10) a control circuit for supplying power to said armature for allowing control of said supply pressure in a supply side for sealing the valve in a low leak position; wherein said manifold further comprises a supply side seat and an exhaust side seat with said valve moving between said supply side seat and said exhaust side seat for selectively and variably positioning therebetween; wherein the valve is a ball positioned between said exhaust side seat and said supply side seat.

Neither Perach nor Hamilton et al., either alone or in combination therewith, discloses such a structure. Specifically, neither reference discloses a ball valve generally, and more specifically, neither reference discloses an actuation member extending from the armature that is operable to selectively contact the ball valve. Both of these references merely disclose poppet types valves that are fastened to, or otherwise connected to, the armature. In contradistinction, the instant invention claims a system wherein a portion of the armature, i.e., the actuation member, can selectively contact the valve. Thus, one of ordinary skill in the art would not look to either of Perach and/or Hamilton et al., either alone or in combination therewith, to construct a variable bleed solenoid, as presently claimed.

Therefore, the Applicants submit that neither Perach nor Hamilton et al., either alone or in combination therewith, render claim 1 obvious. Furthermore, claims 2, 6 and 7, which depend from and further define claim 1, are likewise not render obvious by Perach nor Hamilton et al., either alone or in combination therewith.

Accordingly, the Applicant submits that the 35 USC §103(a) rejection of claims 1-2, 6 and 7 has been overcome.

35 USC §103(a) REJECTION

Claims 4, 5 and 8 stand rejected under 35 USC §103(a) as being unpatentable over U.S. Patent No. 4,538,645 to Perach, as modified, as applied to claim 1 above, and further in view of U.S. Patent No. 5,752,689 to Birkhimer et al.

The Applicants respectfully traverse the 35 USC §103(a) rejection of claims 4, 5 and 8. Claim 4 has been canceled, without prejudice, and substantially incorporated into claim 1. Claim 8 has also been canceled, without prejudice.

As previously noted Perach does not disclose such a structure as recited in claim 1. Specifically, it does not disclose a ball valve generally, and more specifically, it does not disclose an actuation member extending from the armature that is operable to selectively contact the ball valve. Perach merely discloses a poppet type valve that is fastened to, or otherwise connected to, the armature. In contradistinction, the instant invention claims a system wherein a portion of the armature, i.e., the actuation member, can selectively contact the valve.

While Birkhimer et al. arguably discloses a ball type valve, it does not cure the deficiencies in the teachings of Perach. Most importantly, Birkhimer et al. appears to disclose a system wherein there is only one valve seat 74 adjacent to the ball valve 76, as opposed to two valve seats as currently claimed. Thus, one of ordinary skill in the art would not look to either of Perach and/or Birkhimer et al., either alone or in combination therewith, to construct a variable bleed solenoid, as presently claimed.

Therefore, the Applicants submit that neither Perach nor Birkhimer et al., either alone or in combination therewith, render claim 1 obvious. Furthermore, claim 5, which

depends from and furthers define claim 1, is likewise not render obvious by Perach nor Birkhimer et al., either alone or in combination therewith.

Accordingly, the Applicant submits that the 35 USC §103(a) rejection of claim 5 has been overcome.

CONCLUSION

It is respectfully submitted that in view of the above amendments and remarks the claims, as amended, are patentably distinguishable because the cited patents, whether taken alone or in combination, do not teach, suggest or render obvious, the present invention. Therefore, applicant submits that the pending claims are properly allowable, which allowance is respectfully requested.

The Examiner is invited to telephone the applicant's undersigned attorney at (248) 364-4300 if any unresolved matters remain.

Any needed extension of time is hereby requested with the filing of this document.

The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 501612. A duplicate copy of this letter is enclosed herewith for this purpose.

Respectfully submitted,

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